DETAILED ACTION

1. Amendment filed on 1/10/2011 is acknowledged.

Priority

2. Applicant makes the claim that this application is a 371 of PCT/US05/34606 which claims benefit of 60/614,183, 60/681,630, and 60/702,460, however PCT/US05/34606 only claimed benefit to 60/614,183 and 60/702,460. PCT/US05/34606 does not claim benefit to 60/681,630.

Election/Restrictions

3. This application is in condition for allowance except for the presence of claims 5-8, 12-15, 17-20, 23-25, 29, 31, 35-37, 44-48, 97, 99, 101-103, 108-109, 111-112, 116 directed to inventions non-elected without traverse. Accordingly, claims 5-8, 12-15, 17-20, 23-25, 29, 31, 35-37, 44-48, 97, 99, 101-103, 108-109, 111-112, 116 have been cancelled.

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claims 5-8, 12-15, 17-20, 23-25, 29, 31, 35-37, 44-48, 97, 99, 101-103, 108-109, 111-112, 116 are cancelled.

Allowable Subject Matter

5. Claims 62-67, 75-85, 87, 89-96 are allowed.

The following is an examiner's statement of reasons for allowance: A method of dental hard tissue modification where a superficial porous layer of dental hard tissue is formed and then selectively heated to cause the superficial porous layer to fuse; impregnating a superficial porous layer of dental hard tissue with particles having a fluidity temperature about the same as a melting temperature of the dental hard tissue of the superficial porous layer, and selectively heating the layer to a temperature higher than the melting temperature of the dental hard tissue to cause the tissue to fuse; using particles with a fluidity temperature higher than the melting temperature of the dental hard tissue and selectively heating the superficial porous layer to a temperature higher than its melting temperature but lower than the fluidity temperature of the particles; filling a superficial porous layer of the dental hard tissue with a fluidified material of glass, crystal, or ceramic and mixture thereof preheated above at least its fluidity temperature and letting it cool and solidify in the superficial porous layer; and forming a post treatment layer having a composition differing from that of the dental hard tissue by selectively heating a superficial porous layer of the dental hard tissue was neither taught nor suggested by the prior art as a whole, either alone or in combination, and in combination with the elements set forth in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Nelson whose telephone number is (571) 270-5898. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MMN/

/TODD E. MANAHAN/
Supervisory Patent Examiner, Art Unit 3776